

IRON SHIP.

(Received at **FRIDAY, 2 SEPT 1887**)

No. **1014** Survey held at **Kindredyke** Date, First Survey **20 April** Last Survey **30 August 1887**

On the **Japan's screw pump Hopper Barge "Kisogawa"** **Card Number 410**

TONNAGE under Tonnage Deck } 262.72	ONE, OR TWO DECKED, THREE DECKED VESSEL,	Master D. Overland Wm.
Ditto of Third, Spar, or Awning Deck. } 33.13	SPAR, OR AWNING-DECKED VESSEL.	Built at Kindredyke
Ditto of Poop, or Raised Qr. Dk. } 24.37	Half Breadth (moulded) 13.6	When built 1887 Launched July 1st 1887
Ditto of Houses on Deck } 24.37	Depth from upper part of Keel to top of Upper Deck Beams 12.2	By whom built J. & K. Smith
Ditto of Forecastle } 24.37	Girth of Half Midship Frame (as per Rule) 21.6	Owners J. & K. Smith
Gross Tonnage 320.72	1st Number 116.4	Residence Kindredyke
Less Crew Space 16.02	1st Number, if a 3-Decked Vessel ... deduct 7 feet	Port belonging to Japan
304.70	Length 137.7	Destined Voyage Japan
Less Engine Room 94.60	2nd Number 63.89	If Surveyed while Building, Afloat, or in Dry Dock.
Register Tonnage as cut on Beam } 210.16	Proportions— Breadths to Length 5 1/100	while building
	Depths to Length—Upper Deck to Keel 12 3/100	
	Main Deck ditto	

LENGTH on deck as per Rule ... **137** **BREADTH** Moulded ... **13** **DEPTH** top of Floors to Upper Deck Beams ... **9** **Power of Engines** ... **50** **Nº. of Decks with flat laid** **one** **Nº. of Tiers of Beams**

Dimensions of Ship per Register, length, **137.7** breadth, **20.3** depth, **9.4**

	Inches in Ship	Inches per Rule
KEEL , depth and thickness	20 x 9/16	
TEMP , moulding and thickness	6 x 1 1/2	
TERN-POST for Rudder do. do.	6 x 2 3/4	
Distance of Frames from moulding edge to moulding edge, all fore and aft	19 3/4 x 2 1/4	
FRAMES , Angle Iron, for 1/2 length amidships	3 1/2 x 3	6
Do. for 1/4 at each end	3	6
EVERSED FRAMES , Angle Iron	3	6
FLOORS , depth and thickness of Floor Plate at mid line for half length amidships	10	6
thickness at the ends of vessel	15	6
depth at 1/2 the half-bdth. as per Rule	36	6
height extended at the Bilges		
AMS , Upper, Spar, or Awning Deck Angle or double Ang. Iron, Plate or Tee Bulb Iron Angle or double Angle Iron on Upper edge	2 1/4	
Average space	4	6
AMS , Main, or Middle Deck Angle or double Ang. Iron, Plate or Tee Bulb Iron Angle or double Angle Iron on Upper edge	19 3/4	every space
Average space	24	6
AMS , Lower Deck Angle or double Ang. Iron, Plate or Tee Bulb Iron Angle or double Angle Iron on Upper edge	3	6
Average space	6 3/4	6
AMS , Hold, or Orlop Angle or double Ang. Iron, Plate or Tee Bulb Iron Angle or double Angle Iron on Upper edge	3 1/2	6
Average space	10	6
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	6 1/2	6
Rider Plate	3	6
Bulb Plate to Intercoastal Keelson	3	6
Angle Irons	3	6
Double Angle Iron Side Keelson		
Side Intercoastal Plate		
do. Angle Irons		
Attached to outside plating with angle iron		
ANGLE IRONS	3	6
do. Bulb Iron		
do. Intercoastal plates riveted to plating for length		
STRINGER Angle Irons	3 1/2	6

Flat Keel Plates, breadth and thickness ... **28** **9/16**
PLATES in Garboard Strakes, br'dth & thickness ... **7/16**
 " From Garboard to upper part of Bilges ... **1 1/2**
 " Of d'bling at Bilge, or increased thickness, and length applied ... **12 1/2**
 " From up. prt of Bilge to l.r. edge of Sh'rstrake ... **36** **1 1/2**
 " Main Sheerstrake, breadth and thickness ... **1 1/2**
 " Of d'bling at Sh'stk. & lng. applied ... **1 1/2**
 " From M'n. to Up. or Spar Dk. Sh'rstrake ... **1 1/2**
 " Up. or Spar Dk Sh'rstrake, br'dth & thiek'n'ss ... **1 1/2**
 Butt Straps to outside plating, breadth & thickness ... **9 1/2** **1 1/4**
 Lengths of Plating ... **13**
 Shifts of Plating, and Stringers ... **two spaces of frames**
 Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ... **46** **7/16**
 Angle Iron on ditto ... **3 x 3** **1 1/2**
 Tie Plates fore and aft, outside Hatchways ... **10** **1 1/2**
 Diagonal Tie Plates on Beams No. of Pairs ... **5 1/2**
 Flat of Up., Spar, or Awning Dk. ... **5 1/2**
 How fastened to Beams ... **5 1/2**
 Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... **24** **1 1/2**
 Is the Stringer Plate attached to the outside plating? **yes**
 Angle Irons on ditto, No. ... **3 x 3** **1 1/2**
 Tie Plates, outside Hatchways ... **10** **1 1/2**
 Diagonal Tie Plates on Beams, No. of pairs ... **5 1/2**
 Flat of Middle Deck do. fore do. after deck ... **5 1/2** **pitch pine**
 How fastened to Beams ... **screw bolts**
 Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... **2**
 Is the Stringer Plate attached to the outside plating? **yes**
 Angle Irons on ditto, No. ... **2**
 Stringer or Tie Plates, outside Hatchways ... **2**
 Flat of Lower Deck ... **2**
 Ceiling betwixt Decks, thickness and material ... **5 1/2**
 " in hold do. do. ... **5 1/2**
 Main piece of Rudder, diameter at head ... **4**
 do. at heel ... **3**
 Can the Rudder be unshipped afloat? **yes**
 Bulkheads No. **4** No. per Rule **5 1/2**
 Thickness of **5 1/2** in each air tank on each side of main hatch in hold
 Height up **to deck**
 How secured to sides of ship **between two frames**
 Size of Vertical Angle Irons **3 1/2 x 3 x 1/2** and distance apart **30** ins.
 Are the outside Plates doubled two spaces of Frames in length? **yes**

FRAMES extend in one length from **Middle line** to **gunwale** Riveted through plates with **3/4** in. Rivets, about **4.5** apart.
EVERSED ANGLE IRONS on floors and frames extend **across** middle line to **and above side string** and to **alternately**
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? **yes** And butts properly shifted? **yes**
NG. Garboard, double riveted to Keel, with rivets **3/4** in. diameter, averaging **3** ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, **double** riveted; with rivets **3/4** in. diameter, averaging **2 1/2** ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets **3/4** in. diameter averaging **3** ins. from centre to centre.
 Butts of Strakes at Bilge for **whole** length, **double** riveted with Butt Straps **1 1/4** thicker than the plates they connect.
 Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets **3/4** in. diameter, averaging **2 1/2** ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets **3/4** in. diameter, averaging **3** ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for **length** amidships. Butts of Upper or Spar Sheerstrake, treble riveted **length** amidships.
 Butts of Main Stringer Plate, treble riveted for **length** amidships. Butts of Upper or Spar Stringer Plate, treble riveted for **length**.
 Breadth of laps of plating in double riveting **4 1/2** Breadth of laps of plating in single riveting **2 1/2**
 Laps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? **yes** No. of Breasthooks, **3** Crutches, **2**
 Description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? **good**
 Owner's name or trade mark, **Consell & Co. Ltd. Glasgow**
 Is there a correct description. **yes**
 Signature, **J. & K. Smith** Surveyor's Signatures. **J. & K. Smith**
 Surveyor to Lloyd's Register of British and Foreign Shipping.

Workmanship. Are the butts of plating planed or otherwise fitted? *Chiselled.*

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *yes*

Are the fillings between the ribs and plates solid single pieces? *yes*

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *yes*

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*

Do any rivets break into or through the seams or butts of the plating? *no.*

Masts, Bowsprit, Yards, &c., are *pitch pine* in *good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit

For mast 30 ft high thickness 12 inches in diameter
After mast 36 ft 6 in 9 in 5

NUMBER & LETTER for EQUIPMENT

SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested and Superintendent, also Number of Certificate.	ANCHORS.	N°.	Weight, Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Machine where Tested and Superintendent, also Number of Certificate.
N°.	Chain <i>2-18910</i>	<i>90</i>	<i>1"</i>	<i>27.0.0.0</i>		<i>Not tested</i>	Bower Anchors	<i>22321</i>	<i>5.1.3</i>	<i>10.10.0.0</i>		<i>Not tested</i>
Fore Sails,	Iron Steam Chain	<i>90</i>	<i>1"</i>	<i>27.0.0.0</i>		<i>Not tested</i>	Anchors	<i>22322</i>	<i>1.3.19</i>	<i>10.7.2.0</i>		<i>Not tested</i>
Fore Top Sails,	or Steel Wire	<i>60</i>	<i>9/16</i>	<i>3.10.0.0</i>		<i>Not tested</i>	Stream Anchor	<i>22323</i>	<i>5.0.13</i>	<i>7.9.2.26</i>		<i>Not tested</i>
Fore Topmast Stay Sails,	or Hempen Strm Cable	<i>30</i>	<i>7/16</i>	<i>3.15.0.0</i>		<i>Not tested</i>	Kedge		<i>1.1.0</i>	<i>7.9.2.26</i>		<i>Not tested</i>
Main Sails,	Towline, Hemp	<i>120</i>	<i>6"</i>	<i>3.5.0.0</i>		<i>Not tested</i>	2nd Kedge.		<i>2.1.2</i>	<i>4.17.2.0</i>		<i>Not tested</i>
Main Top Sails, and	or Steel Wire	<i>120</i>	<i>3</i>			<i>Not tested</i>			<i>0.1.26</i>			<i>Not tested</i>

Standing and Running Rigging *wire & hemp* sufficient in size and *good* in quality. She has *one* Long Boat and

The Windlass is *Clark's Chapman Patent* Capstan and Rudder *good* Pumps *3*

Engine Room Skylights.—How constructed? *square* How secured in ordinary weather? *with bars*

What arrangements for deadlights in bad weather? *with bars*

Coal Bunker Openings.—How constructed? *round* How are lids secured? *bars* Height above deck? *equal*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *by scuppers*

Cargo Hatchways.—How formed? *square*

State size Main Hatch *62 ft by 12 ft* Forehatch Quarterhatch

If of extraordinary size, state how framed and secured? *with seven webplate beams 24" secured by bracket knees to*

What arrangement for shifting beams? *airtanks on both sides. see sketch*

Hatches, If strong and efficient? *no hatches it is only for sand or mud.*

Order for Special Survey No.

Date *April 1887*

Order for Ordinary Survey No.

Date

No. *410* in builder's yard.

DATES OF SURVEYS held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid....
- 4th. When the ship was complete, and before the plating was finally coated or cemented..
- 5th. After the ship was launched and equipped

while Building

State dates of letters respecting this case

General Remarks (State quality of workmanship, &c.)

The workmanship is very well done

This Pump Hopper Barge (Dredge) is built for the purpose to make deep, some of the Harbours in Japan. In each airtank she has three watertight bulkheads.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate)

How are the surfaces preserved from oxidation? Inside *by paint and cement* Outside *by paint*

I am of opinion this Vessel should be Classed *A.S.*

The amount of the Entry Fee£ *2* : .. is received by me, }

Special£ *16* : *1* : .. 18 }

(to be sent as per margin). Certificate ..

(Travelling Expenses, if any, £ ..)

Committee's Minute *TUESDAY 6 SEPT 1887*

Character assigned *A.S. Steam*

+ M.B. D.M.

Pump Hopper Dredge

Surveyor to Lloyd's Register of British and Foreign Ships

The vessel appears to have been built in accordance with the approved plans, and she appears to be a well constructed A.S. Steam Hopper.

as recommended.

10th

7/9/87

